

**Methods:** We carried out a survey on the compliance to infection control practices among HCWs in the haemodialysis unit of our hospital over a two-week period. Two infection control nurses were stationed at the unit and a standard checklist was prepared. The CDC recommendations for preventing transmission of infections among chronic haemodialysis patients were used as a guide (MMWR 2001;50(No. RR-5)).

**Results:** The unit has 25 dialysis machines with an average number of 46 patients per month. Four medical assistants, 4 nurses and 4 healthcare attendants were observed during the study period. Hepatitis B seropositive patients were managed in a separate area with dedicated dialysis machine from Hepatitis B seronegative patients. The HCWs were most compliance to wearing gloves, provided dedicated items, medications or supplies for single patient use (100% compliance). The HCWs were least compliance to hand washing and removal of gloves in between patients (9% compliance rate). The staff failed to clean or disinfect the prime buckets (0%).

**Conclusion:** The results of the study provided a baseline information on the compliance of the HCWs to infection control practices in the care of haemodialysis patients in our hospital. Continuous education and training of the HCWs in infection control practices which are unique to the haemodialysis centre are required in order to create the awareness of the importance of adherence to these practices and thus will help reduce infections in the patients.

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## 56.006

### Prevalence of nosocomial sinusitis in ICUs admitted patients in Rasool Hospital, Tehran, Iran

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**Background:** We studied the incidence rate of sinusitis in patients with fever of unknown origin (FUO) in ICUs.

**Methods:** A prospective, cross sectional study done in PICU and ICU in Rasool hospital; Tehran Iran (2007-2008). Paranasal sinus computed tomography was performed in all (adult) patients admitted in ICU within 48 h of admission and repeat thereafter (4-7 days) in adult cases with fever of unknown origin (FUO) after initial clinical and diagnostic screening. Infectious sinusitis was diagnosed by microbiological analysis of sinus fluid aspirates.

**Results:** 63 cases had full criteria and followed for nosocomial sinusitis (age = 1–86 years; mean 17 ± 25). Acute bacterial nosocomial sinusitis proved in 82% (51/63), Allergic sinusitis 18% (n=12). Head trauma was the most common cause of admission in 45% (n=22) of cases. Positive cultures seen in 82% (45/51) of cases included: Staphylococcus Aureus, Streptococcus spp in 22% (n=9), gram negative organisms predominantly *Klebsiella*, *Pseudomonas* and acinetobacter species detected in 41% (n=19), mixed aerobic/anaerobic in 37% (n=17) of cases. 7 patients had

dren, Hemophilus influenza detected in 2 cases. Mean age of cases for nosocomial infection included: Gram negative organisms 7 years; Staph 14 year and mixed infection 27 years. We did not observe correlation between type of organisms and GCS; ( $P=0.3$ ).

**Conclusion:** Physicians treating critically ill patients should be aware of the high risk of nosocomial sinusitis especially in cases with head trauma. Appropriate preventive measures, including the removal of nasogastric tubes in patients requiring long-term mechanical ventilation and routine investigation of FUO should include sinus CT scan should be linked to naso tracheal intubation, but its occurrence after orotracheal intubation is less clear.

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## 56.007

### Aspects of needlestick injuries among medical students: Reported or not?

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**Background:** Medical students (MS) may be at high risk for needlestick injuries (NSI) and hence of transmission of blood borne pathogens including Hepatitis B (HBV), Hepatitis C (HCV) and HIV. Information is limited regarding the frequency of NSIs, the associated factors and the barriers to reporting them.

**Methods:** A self-administered anonymous questionnaire was distributed to 81 MS during an international students meeting on public health (ISMOPH). The questionnaire consisted of 21 questions covering topics including the frequency and reporting of NSIs as well as policy and post-exposure experiences. Completion of the survey was considered implied consent for study participation. The study served as a pre-test for an international cross-sectional multicentre study on NSIs among MS to evaluate the validity and feasibility of the developed survey questionnaire.

**Results:** A total of 32 MS completed the questionnaire giving a response rate of 40%. 25% (8/32) reported that they had at least one NSI during their studies and for 38% of respondents, that injury had involved a high-risk patient (defined as history of HBV, HCV and/ or HIV). 7 of the students reported that the injury was "self-induced" and described a feeling of being in "hurry" as the underlying cause. 50% (4/8) did not report the most recent NSI. The main reasons for under-reporting were due to an injury with a clean needle, little or no perception of risk as well as shame of having a NSI. 69% (22/32) reported that their facility has a clear policy regarding post-exposure follow-up of NSIs, whereas more than a third were not familiar with this policy. When 81 MS were